

Chris:

Per Bob's request the following Draft Comments regarding the Onondaga Lake Baseline Ecological Risk Assessment (BERA) are those which I have noted and which I believe are of substantial significance in addressing the acceptability of the BERA. As I reviewed the document there also appeared to be a substantial number of additional problems (comments), which so far seem to be less significant, but which should be addressed if this document is accepted. A more detailed review of this document will take a substantial amount of time since many of the apparent problems will need to be evaluated by reviewing both the supporting data and literature. As you are well aware we have not been involved in a lot of the work that has been done at this site. Do you know if we will be providing a detailed document review through the BTAG? I would recommend that we do so if time permits.

The development of the Onondaga Lake Sediment Quality (OLSQVs) values based on Site specific Apparent Effects Thresholds (AETs) is unacceptable because of the way toxicity values are employed in developing the AETs and because there should be more consideration given to other measures of toxicity when developing the OLSQVs. The chemical data associated with the lowest significant laboratory test for toxicity should be used to develop a single set of AETs. A No Observed Adverse Effect Level (NOAEL) based on literature values or site specific data should also be developed. The range between these two values sets should be evaluated based on impacts to the benthic invertebrate community and by incorporating the other site specific information that has been developed such as Hazard Quotients and Toxicity Reference Values (TRVs). This weight of evidence approach should then be used in establishing the OLSQVs.

In a quick spot check I found that the TRV selected for methylmercury in fish may not be the most conservative value available. In Jarvinen and Ankley (1998) there are two values cited, which may be appropriate, that are lower than the Lowest Observed Adverse Effect Level (LOAEL) TRV used in this BERA. A review of the original literature may be necessary to determine if these lower values are appropriate for use in this BERA and if so then changes should be made. It would also be appropriate to review the other TRVs used in this BERA if there is a reasonable chance that somewhat lower TRV may influence the conclusions regarding ecological risk.